CLAIMS

 A method, characterized in that a uridine derivative represented by formula (1):

wherein, X represents a hydrogen atom, a halogen atom, an alkyl group having 1 to 4 carbon atoms, an alkyl group having 1 to 4 carbon atoms substituted with a halogen atom(s), or an alkenyl group having 2 to 4 carbon atoms, and R1 and R2 each independently represent either a hydrogen atom or a hydroxyl-protecting group, and R3 represents a hydrogen atom, a halogen atom, a hydroxyl group, an alkyl group having 1 to 4 carbon atoms, a cyano group, an alkenyl group, an alkynyl group, an alkoxy group having 1 to 4 carbon atoms, a hydroxyl group substituted with a hydroxyl-protecting group, is reacted with a tertiary amine and dehydrating reactant, followed by ammonia, or a primary or a secondary amine represented by formula (2):

HNR4R5

(2)

wherein, R4 and R5 each independently represent a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, a cycloalkyl group having 5 to 8 carbon atoms, an alkyl group having 1 to 4 carbon atoms substituted with a halogen atom(s), or an alkenyl group having 2 to 4 carbon atoms, or R4 and R5 linked together may form a ring,

for producing a cytidine derivative represented by formula (3):

R1
$$0$$
 NR_4R_4 R_4 R_4

wherein, X, R1, R2, R3, R4 and R5 are as defined above.

2. The method for producing cytidine derivatives according to Claim 1, where R1 and R2 each independently are an aliphatic acyl group having 1 to 4 carbon atoms, an aromatic acyl group, an aromatic acyl group substituted with an alkyl group(s) having 1 to 4 carbon atoms, an aromatic acyl group substituted with a halogen atom(s), an aromatic acyl group substituted with an alkoxy group(s) having 1 to 4 carbon atoms, or a trialkylsilyl group, R3 is a hydrogen atom, an alkoxy group having 1 to 4 carbon atoms, an aliphatic alkyloxy group having 1 to 4 carbon atoms substituted with an alkoxy group (s) having 1 to 4 carbon atoms, an aliphatic acyloxy group having 1 to 4 carbon atoms, an aliphatic acyloxy group having 1 to 4 carbon atoms, an aliphatic acyloxy group, an aromatic

acyloxy group substituted with an alkyl group(s) having 1 to 4 carbon atoms, an aromatic acyloxy group substituted with a halogen atom(s), or an aromatic acyloxy group substituted with an alkoxy group(s) having has 1 to 4 carbon atoms.

- 3. The method for producing cytidine derivatives according to Claim 2, where X represents a hydrogen atom or a methyl group, R3 is a hydrogen atom, a methoxy group, or a methoxyethy group.
- 4. The method for producing cytidine derivatives according to Claim 1 to 3, where said tertiary amine is an alicyclic amine represented by formula (4):

$$A \longrightarrow N \xrightarrow{C} \stackrel{H_2}{\xrightarrow{C}} \stackrel{n}{\xrightarrow{M_2}} Y \longrightarrow Z$$

$$(4)$$

wherein, n and meach independently represent an integer of 1 to 4, Y represents hydrogen atom, carbon atom, nitrogen atom, oxygen atom, sulfur atom, Z represents hydrogen atom, an alkyl group having 1 to 4 carbon atoms, an alkyl group having 1 to 4 carbon atoms substituted with a halogen atom(s), an alkenyl group having 2 to 4 carbon atoms, or Z attached to A may form a ring, A represents an alkyl group having 1 to 4 carbon atoms, an alkyl group having 1 to 4 carbon atoms substituted with a halogen atom(s), an alkenyl group having 2 to 4 carbon atoms, or A attached to Z may form a ring.

5. The method for producing cytidine derivatives according to Claim 4, characterized in that a reaction intermediate, in reacting uridine derivatives with a tertiary amine and a dehydrating reactant, is a cytidine derivative represented by formula (5):

wherein, X, R1, R2, R3, n, m, A, Y and Z are as defined above.

6. The method for producing cytidine derivatives according to Claim 1 to 3, where said tertiary amine is an aliphatic amine represented by formula (6):

wherein, R6, R7 and R8 each independently represent an alkyl group having 1 to 4 carbon atoms, a cycloalkyl group having 5 to 8 carbon atoms, an alkyl group having 1 to 4 carbon

atoms substituted with a halogen atom(s), or an alkenyl group having 2 to 4 carbon atoms.

- 7. The method for producing cytidine derivatives according to Claim 1 to 6, wherein said tertiary amine is N-methylpiperidine, N-methylmorpholine, 1,4-diazabicyclo[2.2.2]octane, N,N'-dimethylpiperazine, or trimethylamine.
- 8. The method for producing cytidine derivatives according to Claim 1 to 7, characterized in that said dehydrating reactant is acid halides or acid anhydrides, and said reaction is carried out in the presence of a deacidifying agent.
- 9. The method for producing cytidine derivatives according to Claim 1 to 8, wherein said deacidifying agent is p-toluenesulfonyl chloride.
- 10. The method for producing cytidine derivatives according to Claim 1 to 9, wherein the molar ratio of said tertiary amine to said uridine derivative represented by formula (1) is 1.2 or less.
 - 11. A cytidine derivative represented by formula (5):

wherein, X, R1, R2, R3, n, m, A, Y and Z are as defined above, or salts thereof.

- 12. The cytidine derivative or salts thereof according to Claim 11, where X represents a hydrogen atom or a methyl group, R1 and R2 are a hydrogen atom or a hydroxyl-protecting group, R3 is a hydrogen atom, a methoxy group, or a methoxyethyloxy group, n and m are 2, A is a methyl group, and Y is a methylene group or an oxygen atom.
- 13. A method for producing a cytidine derivative represented by formula (3):

$$\begin{array}{c} R1 - 0 \\ NR_4R_5 \\ R2 - 0 \end{array}$$

(3)

wherein, X, R1, R2, R3, R4 and R5 are as defined above, characterized in that the cytidine derivative or salts thereof according to Claim 11 and 12 is reacted with ammonia or a primary or secondary amine.